CLAIMS

1. A processor-readable medium comprising processor-executable instructions for generating a PDF document from a PPML document, the processor-executable instructions comprising instructions for:

5   parsing structures within the PPML document;

generating a PDF document tree; and

interpreting the parsed structures from the PPML document onto locations on the PDF document tree.

10   2. The processor-readable medium of claim 1, additionally comprising instructions for:

configuring a PDF document according to the PDF document tree; and

printing the PDF document.

15   3. A processor-readable medium as recited in claim 1, wherein interpreting the parsed structures comprises instructions for:

resolving, for objects within the PPML document, a PPML SOURCE_TYPE class; and

translating the objects according to the PPML SOURCE_TYPE class.

20

4. A processor-readable medium as recited in claim 1, wherein interpreting the parsed structures comprises instructions for:

un-marshalling a PPML instance, when a PPML tag refers to an external object; and

25   embedding the external object into the PDF document.

     Case No. 200313161-1

5. A processor-readable medium as recited in claim 4, wherein the external object to which the PPML tag refers includes fonts and images.

6. A processor-readable medium as recited in claim 1, wherein interpreting the parsed structures comprises instructions for:

resolving references within the parsed structures into PDF assets; and

incorporating the PDF assets into the PDF document.

7. A processor-readable medium as recited in claim 6, wherein resolving references comprises instructions for:

resolving an image asset into an InputSource object using a PPML structure; and

incorporating the image asset into the PDF document.

8. A processor-readable medium as recited in claim 7, wherein the PPML structure comprises:

<SOURCE Format="image/jpeg" Dimensions "dim1 dim2">

<EXTERNAL_DATA_ARRAY Src="filename.jpg"/>

</SOURCE>.

9. A processor-readable medium as recited in claim 1, wherein interpreting the parsed structures comprises instructions for:

resolving assets within the parsed structures into objects; and

incorporating the objects into the PDF document.

Case No. 200313161-1

10. A processor-readable medium as recited in claim 9, wherein resolving assets comprises instructions for:

using a PPML structure to translate an asset into an iText font representing a TTF font.

5

11. A processor-readable medium as recited in claim 1, wherein interpreting the parsed structures comprises instructions for:

reutilizing PPML global objects found within the PPML document with a PPML structure, wherein the PPML global objects are configured as

10 REUSABLE_OBJECT_TYPE.

12. A processor-readable medium as recited in claim 1, wherein interpreting the parsed structures comprises instructions for:

locating PPML global impositions when parsing the structures within

15 the PPML document; and

reutilizing the PPML global impositions.

13. A processor-readable medium as recited in claim 12, wherein reutilizing PPML global impositions comprises instructions for:

20 reutilizing IMPOSITION_TYPE instances.

14.   A system for converting a PPML document into a PDF document, comprising:

a first component to parse structures and tag items within the PPML document;

5   a second component to generate a PDF document tree; and

a third component to translate the tagged items within the PPML document, and to locate the translated items on the PDF document tree.

15.   The system of claim 14, additionally comprising:

10   a forth component to un-marshal PPML instances of external objects for embedding within the PDF document tree.

16.   The system of claim 14, wherein the forth component comprises:

a SourceResolver to resolve references into assets for attachment to the

15   PDF document tree;

a FontResolver Interface to resolve fonts for access by the PDF document;

an OccurrenceStore Interface to reutilize PPML global objects for access by the PDF document; and

20   an ImpositioningStore to reutilize PPML global impositions for access by the PDF document.

17.   The system of claim 14, additionally comprising:

a fourth component to resolve PPML SOURCE_TYPE class of the

25   structures within the PPML document.

18. The system of claim 14, wherein the third component translates the items tagged as a function of a type associated with each of the items tagged.

19. The system of claim 14, wherein the third component is configured to translate a PDF object within a PdfTemplate defined as a function of an item type of the tagged items found during parsing by the first component.

20. The system of claim 19, wherein the PdfTemplate is configured to support caching of objects to optimize PDF structure.

21. A PPML to PDF converter for converting a PPML document into a PDF document, comprising:

means for parsing structures within the PPML document;

means for generating a PDF document tree; and

means for interpreting the parsed structures from the PPML document onto locations on the PDF document tree.

22. The PPML to PDF converter as recited in claim 21, wherein the means for interpreting comprises:

means for un-marshalling a PPML instance, when a PPML tag set by the means for parsing refers to an external object; and

means for embedding the external object into the PDF document.

23. The PPML to PDF converter of claim 21, additionally comprising:

means for resolving references into assets for attachment to the PDF document tree;

5   means for resolving fonts for access by the PDF document;

means for reutilizing PPML global objects for access by the PDF document; and

means for reutilizing PPML global impositions for access by the PDF document.

10

24. The system of claim 21, additionally comprising:

means for resolving, for objects within the PPML document, a PPML SOURCE_TYPE class; and

means for translating the objects according to the PPML

15   SOURCE_TYPE class.

25. A method for converting a PPML document into a PDF document, comprising:

parsing structures within the PPML document;

20   generating a PDF document tree; and

interpreting the parsed structures from the PPML document onto locations on the PDF document tree.

26.   The method of claim 25, wherein interpreting the parsed structures comprises:

un-marshalling a PPML instance, when a PPML tag set during parsing refers to an external object; and

5   embedding the external object into the PDF document.

27.   The method of claim 25, wherein interpreting the parsed structures comprises instructions for:

resolving references within the parsed structures into PDF assets; and

10   incorporating the PDF assets into the PDF document.

28.   The method of claim 27, wherein resolving references comprises instructions for:

resolving an image asset into an InputSource object using a PPML

15   structure; and

incorporating the image asset into the PDF document.

29.   A processor-readable medium comprising processor-executable instructions for:

processing a PDF document to produce a PPML document, wherein the processing comprises instructions for:

5   converting a PDF element within the PDF document into a variable object;

generating a macro to contain rules governing operation of the variable object; and

configuring the PPML document to include the variable object, 10   the macro and the PDF document, wherein the PDF document is configured as a background within the PPML document; and

checking accuracy of the PPML document by producing a PDF document from the PPML document.

15   30.   The processor-readable medium of claim 29, wherein checking accuracy comprises instructions for:

parsing structures within the PPML document;

generating a PDF document tree; and

interpreting the parsed structures from the PPML document onto 20   locations on the PDF document tree.

31.   The processor-readable medium of claim 29, additionally comprising instructions for:

configuring a PDF document according to the PDF document tree; and

25   printing the PDF document.

32. A method for printing a PDF file, comprising:

sending a PPML file to a PPML to PDF converter;

converting the PPML file into the PDF file, wherein the converting

comprises parsing and tagging items within the PPML file and

translating the tagged items; and

printing the PDF file.

33. A system for printing a PDF file, comprising:

a PPML to PDF converter, configured to receive a PPML file and

configured to create the PDF file; and

a printing device, to print the PDF file.

34. The system of claim 33, wherein the PPML to PDF converter

comprises:

a parsing and tagging component configured to parse the PPML file and

locate references to assets;

a translation component, to translate the assets located by the references;

and

a PDF tree-generating component, to generate a PDF tree to form the

PDF file according to the translated assets.

41   *Case No. 200313161-1*